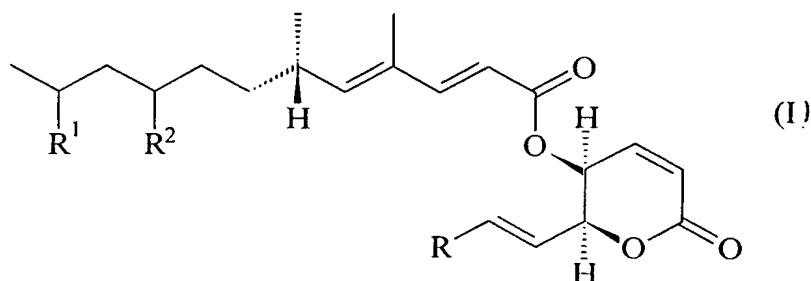


CLAIMS

1. A 5,6-dihydro- α -pyrone of formula (I)

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wherein R is CO₂H or CH₃ and each of R¹ and R² is H; or R is CO₂H, one of R¹ and R² is H and the other is OH; or, when R is CO₂H, a pharmaceutically or veterinarilly acceptable salt thereof.

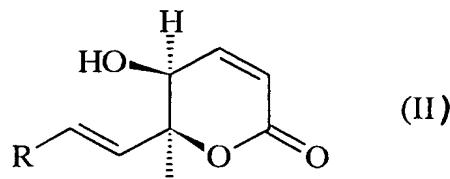
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2. A process for the preparation of a 5,6-dihydro- α -pyrone of formula (I) as defined in claim 1 or a pharmaceutically or veterinarilly acceptable salt thereof, which process comprises:

- 20 (i) fermenting, in a source of carbon, nitrogen and inorganic salts, fungal strain *Phomopsis* sp. 22502 (CBS 313.96) or a mutant thereof which produces a said 5,6-dihydro- α -pyrone;
- (ii) isolating a said 5,6-dihydro- α -pyrone from the fermentation broth; and
- 25 (iii) if desired when the isolated said 5,6-dihydro- α -pyrone is the compound of formula (I) wherein R is CO₂H, converting the said 5,6-dihydro- α -pyrone into a pharmaceutically or veterinarilly acceptable salt thereof.

3. A process for the preparation of a 5,6-dihydro- α -pyrone of formula (I), as defined in claim 1, wherein R is CH₃, which process comprises esterifying the phomalactone of formula (II) :

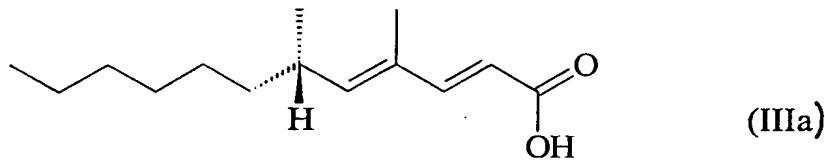
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with a fatty acid of formula (IIIa) :

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4. A pharmaceutical or veterinary composition
20 comprising a pharmaceutically or veterinarily acceptable carrier or diluent and, as active ingredient, a compound as claimed in claim 1.

5. A compound according to claim 1 for use in a method of treatment of the human or animal body by therapy.

25 6. A compound according to claim 5 for use as a cytokine production inhibitor.

7. A compound according to claim 6 for use as an IL-1 production inhibitor.

8. A compound according to claim 6 for use in the

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treatment of an immunoinflammatory condition.

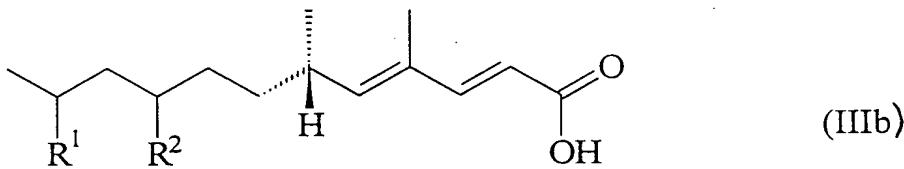
9. A compound according to claim 8 for use in the treatment of rheumatoid arthritis, osteoarthritis, septic shock, psoriasis, atherosclerosis, inflammatory bowel disease, 5 Crohn's disease or asthma.

10. A compound according to claim 6 for use in the treatment of a central nervous system disorder.

11. A process for the preparation of the phomalactone of formula (II) defined in claim 3, which process comprises:

- 10 (i) fermenting, in a source of carbon, nitrogen and inorganic salts, fungal strain *Paecilomyces* sp. 3527 (CBS 314.96) or a mutant thereof which produces the said phomalactone; and
- (ii) isolating the said phomalactone from the fermentation broth.

12. A fatty acid of formula (IIIb) :



20 wherein one of R^1 and R^2 is H and the other is H or OH. α

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13. A process for the preparation of a fatty acid of formula (III) :

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treatment of an immunoinflammatory condition.

9. A compound according to claim 8 for use in the treatment of rheumatoid arthritis, osteoarthritis, septic shock, psoriasis, atherosclerosis, inflammatory bowel disease, 5 Crohn's disease or asthma.

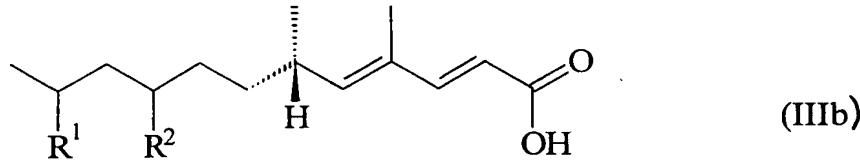
10. A compound according to claim 6 for use in the treatment of a central nervous system disorder.

11. A process for the preparation of the phomalactone of formula (II) defined in claim 3, which process comprises:

10 (i) fermenting, in a source of carbon, nitrogen and inorganic salts, fungal strain *Paecilomyces* sp. 3527 (CBS 314.96) or a mutant thereof which produces the said phomalactone; and

15 (ii) isolating the said phomalactone from the fermentation broth.

12. A fatty acid of formula (IIIb) :



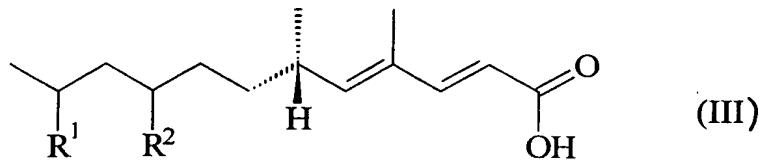
20

wherein one of R¹ and R² is H and the other is H or OH.

25

13. A process for the preparation of a fatty acid of formula (III) :

5



wherein one of R¹ and R² is H and the other is H or OH.

which process comprises:

(i) fermenting, in a source of carbon, nitrogen and inorganic salts, fungal strain *Phomopsis* sp. 22502 (CBS 313.96) or

10 a mutant thereof which produces the said fatty acid; and

(ii) isolating the said fatty acid from the fermentation broth.

14. A biologically pure culture of fungal strain

Phomopsis sp. 22502 (CBS 313.96) or a mutant thereof which

15 produces a 5,6-dihydro- α -pyrone of formula (I) as defined in

a claim 1 ~~or a fatty acid of formula (III) as defined in claim~~

15. A biologically pure culture of fungal strain *Paecilomyces* sp. 3527 (CBS 314.96) or a mutant thereof which

20 produces a phomalactone as defined in claim 3.

16. A process for fermenting fungal strain *Phomopsis*

sp. 22502 (CBS 313.96) or a mutant thereof as defined in claim 13, which process comprises fermenting strain *Phomopsis* sp.

22502 (CBS 313.96) or a said mutant thereof in a source of 25 carbon, nitrogen and inorganic salts.

17. A process for fermenting fungal strain *Paecilomyces* sp. 3527 (CBS 314.96) or a mutant thereof as defined in claim 14, which process comprises fermenting strain *Paecilomyces* sp.

3527 (CBS 314.96) or a said mutant thereof in a source of carbon, nitrogen and inorganic salts.

Add A17